

Detailed Description of the Invention
July 12, 2004

This invention is to be used to hold frames in square while they are being glued. They are very easy to use and do not require any attachment to the jaws of beam clamping devices.

One who is has just ordinary skill in the art of frame making will be familiar enough with the art and will only have to do the following to utilize the functionality of the Bar Clamp Corner Squaring devices. (Refer to Drawing Figure 2A for part number references.)

- 1) Place two beam clamping devices on a flat surface. (Parts 1 & 2)
- 2) Set Bar Clamp Corner Squaring devices (Parts 3, 4, 5, 6) into the jaws of two beam clamping devices.
- 3) Insert the frame members that will be assembled. (Parts 7, 8, 9, 10)
- 4) Apply glue to the ends of the frame members
- 5) Adjust the beam clamping jaws to apply pressure on the assembled frame members.
- 6) Place two additional beam clamping devices (Parts 7 & 8) perpendicular to the initial ones (Parts 1 & 2) and adjust by clamping to the beams of the first two devices. (Parts 1 & 2)
- 7) Tighten beam clamping devices to ensure that assembled frame is in square.
- 8) Wait a sufficient time period to allow the glue to dry
- 9) Remove beam clamping devices and the Bar Clamp Corner Squaring devices.

The invention is easy to use and provides the ability to be used with beam clamping devices without being fastened to them provide it with versatility. Major tightening adjustments can be made by sliding the opposing jaws of the beam clamping device (Parts 13, 14, 15, 16) along the bar. Minor tightening can be made by turning the adjusting screw (top fixed portion of each bar clamping device – parts 1, 2, 3, 4.). By making the major adjustment by sliding the jaw along the bar facilitates the tightening process reduces the time spent.

The strength of the 90 degree welded corned assures that the clamped work piece will be maintained in a flat and square fashion. The two sides of the device are individually welded to the bottom pieces well as being welded to each other.

The Bar Clamp Corner Squaring devices are easily stored and can be nested together to save space.

Description of Drawings
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There are two drawings attached:

Drawings:

Figure 1A: Shows the adaptor separately and on one beam clamp assembly. The dimensional information for the adaptor is also provided in three (3) separate views of the adaptor.

Figure 2A: Shows all four adaptors in place and how they would clamp a picture frame with four beam clamp assemblies.